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10/772,393	02/06/2004	Jin-Won Kim	P56929	5028

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EXAMINER
TIV, BACKHEAN

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 3/11/08.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-16 is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-16 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

Detailed Action

Claims 1-16 are pending in this application. The applicant have amended claims 1-16.

This is a response to the Amendments/Remarks filed on 3/11/08. This action is made

FINAL.

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35

U.S.C. 119(a)-(d).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4,6-9,11-14,16 are rejected under 35 U.S.C. 103(a) as being

unpatentable over US Publication 2004/0052263 issued to Xu in view of *A Method of*

Transmitting PPP Over Ethernet, RFC 1516, Mamkos et al.(Mamkos), Feb.1999 in

further view of US Publication 2003/0131133 issued to Nyu et al.(Nyu).

As per claim 1. Xu teaches a PPPoE (Point-to-Point Protocol over Ethernet)

network system, comprising: a client connected to a server through an Ethernet

line(para.0009); said client transmitting a PPPoE Active Discovery Initiation (PADI)

packet to said server if said client becomes disconnected from said server in a manner

other than by transmission of PPPoE Active Discovery Terminate (PADT)packets

between said client and said server(para.0061); packet received from said server,

following the transmission of said PPPoE Active Discovery Initiation (PADI) packet,

packet received from said server was a PADO (PPPoE Active Discovery Offer)

packet(para. 0065); checking for a server transmitted PPPoE Active Discovery

Terminate (PADT)packet in response thereto(para.0062); and said client transmitting a

new PPPoE Active Discovery Initiation (PADI) packet to said server to reconnect said

server and said client, when said client receives the server transmitted PPPoE Active

Discovery Terminate (PADT)packet(para.0062).

   Xu however does not explicitly teach extracting a session-ID and loading it into a

PPPoE Active Discovery Terminate packet and transmitting the PPPoE Active

Discovery Terminate packet to the server.

   Mamakos teaches extracting a session-ID and loading it into a PPPoE Active

Discovery Terminate packet and transmitting the PPPoE Active Discovery Terminate

packet to the server(page 5, section 5.5).

   Therefore it would have been obvious to one ordinary skill in the art at the time of

the invention to modify the teachings of Xu to include extracting a session-ID and

loading it into a PPPoE Active Discovery Terminate packet and transmitting the PPPoE

Active Disovery Terminate packet to the server as taught by Mamakos in order to

terminate a PPPoE session.

   One ordinary skill in the art would have been motivated to combine the teachings

of Xu and Mamakos in order to terminate a PPPoE session.

Xu in view of Mamakos does not explicitly teach said client extracting a session-ID from said packet received from said server when it is determined that the packet received from said server is the session packet.

Nyu teaches client extracting a session-ID from said packet received from said server when it is determined that the packet received from said server is the session packet(para.0052).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Xu in view of Mamakos to include client extracting a session-ID for a session packet as taught by Nyu in order to connect to networks of different protocols(Nyu, para.0002).

One ordinary skill in the art would have been motivated to combine the teachings of Xu, Mamakos, and by Nyu in order to connect to networks of different protocols(Nyu, para.0002).

As per claim 2, the system as set forth in claim 1, wherein said client checks a value of a Code field in said packet received from said server, when checking whether the packet received from said server is the PADO (PPPoE Active Discovery Offer) packet(Nyu, para.0015, Xu, para.0060). Motivation to combine set forth in claim 1.

As per claim 3, the system as set forth in claim 1, further comprising: said client transmitting a PADR (PPPoE Active Discovery Request) packet to said server when the client determines that the packet received from said server is the PADO (PPPoE Active Discovery Offer) packet and checking for a server transmitted PADS (PPPoE Active Discovery Session-confirmation) packet in response thereto; and said client and said

server beginning a PPP (Point-to-Point Protocol) session stage when the client receives

the server transmitted PADS (PPPoE Active Discovery Session-confirmation)

packet(Mamakos, section 5.3-5.4). Motivation to combine set forth in claim 1.

As per claim 4, the system as set forth in claim 3, wherein said client checks a

value of a Code field in said packet received from said server, when checking whether

the packet received from said server is the PADO (PPPoE Active Discovery Offer)

packet(Nyu, para.0015, Xu, para.0060). Motivation to combine set forth in claim 1.

As per claim 13, the method as set forth in claim 11, wherein the client decides

the packet is the discovery stage offer packet if the Code field of the received packet is

set as 0x07 and decides the packet is the session stage packet if the Code field of the

received packet is set as 0x00(Xu, para.0062).

As per claim 14, the method as set forth in claim 12, wherein the client decides

the packet is the discovery stage offer packet if the Code field of the received packet is

set as 0x07 and decides the packet is the session stage packet if the Code field of the

received packet is set as 0x00(Xu, para.0062).

As per claim 16, the method as set forth in claim 11, wherein said abnormal

manner is any manner other than by transmission of respective discovery stage

terminate packets between said client and said server(Xu, para.0060).

As per claims 6-9, 11,12,do not teach or further define over the limitations in

claims 1-4. Therefore claims 6-9, 11, 12 are rejected for the same reasons set forth

above.

Claims 5,10,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2004/0052263 issued to Xu in view of *A Method of Transmitting PPP Over Ethernet*, RFC 1516, Mamkos et al.(Mamkos), Feb.1999 in further view of US Publication 2003/0131133 issued to Nyu et al.(Nyu) in further view of US Publication 2003/0182434 issued to Ogushi et al.(Ogushi).

Xu in view of Mamkos in further view of Nyu does not explicitly teach as per claim 5, the system as set forth in claim 1, further comprising:

said client also extracting a client MAC (Media Access Control) address from said packet received from said server and storing the client MAC (Media Access Control) address; and said client loading said client MAC (Media Access Control) address of the PPPoE Active Discovery Terminate (PADT)packet being transmitted to said server.

Xu in view of Mamkos in further view of Nyu however, does teach extracting session-ID and using the ID in the PADT packet for termination of a session(Mamkos, 5.5).

Ogushi teaches the extraction of a MAC address from a data packet from a server and loading that information into another packet(para.0024-0026). It is obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Ogushi from extraction of a MAC address from a data packet from a server and loading that information into another packet to instead extract a client MAC address from a data packet and loading the information into a PADT packet.

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Xu in view of Mamkos in further view of Nyu to

include extracting a MAC address from a data packet and loading that information into another packet as taught by Ogushi in order provide a system that can distribute connection requests from clients to servers.

One ordinary skill in the art would have been motivated to combine the teachings of Xu, Mamkos, Nyu, Ogushi in order to provide a system that can distribute connection requests from clients to servers..

As per claims 10,15, do not teach or further define over the limitations in claims 5. Therefore claims 10,15 are rejected for the same reasons set forth above.

Response to Arguments

All previous rejections are withdrawal due to applicant's Amendments/Remarks.

Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in its entirety as potentially teaching of all or part of the claimed invention.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Backhean Tiv whose telephone number is (571) 272-5654. The examiner can normally be reached on M-F 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the
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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Backhean Tiv/
Examiner, Art Unit 2151
6/20/08

/John Follansbee/
Supervisory Patent Examiner, Art Unit 2151